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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,227	10/06/2000	Paul A. Monte	900.8500USU	1612

41339 7590 06/14/2005

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EXAMINER	
MEHRA, INDER P	

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/680,227	MONTE ET AL.	
	Examiner	Art Unit	
	Inder P. Mehra	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 October 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application filed dated: 2/4/2005.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show labels in figs. 1 and 2 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1, 6 and 42 are objected to because of the following informalities:

Claims 1, 6 and 42 recite the following limitation "routing (saidl) individual ones of said code division multiplexed channel blocks to their destination in accordance with the individual predetermined spreading waveforms. In this limitation, it is not clear as to in which location, the limitation: "routing—" is carried out or performed? Is it performed in gateway, or satellite or any other router?

Appropriate correction/clarification is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 rejected under 35 U.S.C. 102(e) as being anticipated by **Harms et al** (US Patent No. 6,493,376), hereinafter, Harms.

For claims 1 and 42, Harms discloses, in reference to fig. 1), "a method for processing communications in a satellite telecommunications system (col. 1 lines 12-20), comprising the steps of:

- providing a gateway and a satellite(14 and 16) coupled together through at least one feeder link (42, 46 and 48, forward link, col. 2 lines 40-45,), said feeder

link conveying a plurality of channel blocks, (refer to fig. 1. col. 7 lines 20-32, "channelizing codes", col. 1 lines 66-col. 2 line 5);

- code division multiplexing each of said plurality of channel blocks using apredetermined spreading waveform selected to indicate an origin and a destination of each of said plurality of channel blocks (channelizing orthogonal code using PN chip rate, refer to col. 2 lines 3-20);
- transmitting said code division multiplexed channel blocks; and,routing said individual ones of said channel blocks to their destination in accordance with the individual predetermined spreading waveforms ("The system users communicate through gateways and satellites, or terrestrial base stations (also referred to as cell-sites or cells) using CDMA spread spectrum communication signals", refer to col. 1 lines 40-45, using preselected PN spreading code—moculation signals, refer to col. 4 lines 40-45, col. 4 lines 53-55.

For claims 2-4, Harms discloses the following limitations:

- wherein said at least one feeder link is a return feeder link, **as in claim 2,** refer to 42, 46 and 48, col. 8 lines 15-18 .
- wherein said at least one feeder link is a forward feeder link, , **as in claim 3,** refer to 42, 46 and 48, col. 8 lines 15-18 .
- wherein said destination comprises at least a beam of a forward service link, , **as in claim** 4, refer to col. 2 lines 2-5, col. 9 line 2.

Allowable Subject Matter

6. Claims 5-41 are objected to as being dependent upon a rejected base claim, see objection to drawings and claims" but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 2/4/2005 have been fully considered but they are not persuasive.

Applicant argues that no where in these recitations is there taught, suggested or implied providing a plurality of channel blocks which are code division multiplexed using a predetermined spreading waveform selected to indicate an origin and a destination of each of said plurality of channel blocks and thereafter transmitting the CDMA channel blocks to their destination in accordance with individual predetermined spreading waveform.

In response, it is stated that Harm discloses, in reference to figs. 1 and 3, ***the channel blocks***, refer to col. 3 lines 59-61, CDMA, col. 1 lines 65-67, predetermined spreading waveform, (refer to "That is, each user transceiver **has its own orthogonal channel** provided on the forward link by using **a unique `covering` or `channelizing` orthogonal code**. **PN code based modulation techniques used in CDMA signal processing allow spectrally similar communication signals to be quickly differentiated,** col. 2 lines 3-30; a more detailed representation of an exemplary block correlator 142 is illustrated in FIG. 12. When a block of decoded **outer PN code chips is transferred to correlator 142,, where block of data (channel block) is associated, In fig. 3. PN code80 is used to combine with data**. It also

shows, its origin 78 to destination 76 in fig. 3, because PN is correlated at source of data and orthogonal is used to identify Base station.

However, Harms's second reference (US Patent No. 6,765,953) discloses a set of ***preselected pseudorandom noise (PN) code sequences is used to modulate (i.e., spread") information signals over a predetermined spectral band*** prior to modulation onto a carrier signal for transmission as communications signals. ***PN spreading, a method of spread-spectrum transmission*** that is well known in the art, produces a signal for transmission that has a bandwidth much greater than that of the data signal. In a satellite forward communications link (that is, in a communications link ***originating at a gateway (origin) and terminating at a user terminal) (destination),*** PN spreading codes are used to discriminate between signals transmitted by a gateway over different beams, and to discriminate between multipath signals. These PN codes are usually shared by all communications signals within a beam.

In light of above explanation, arguments by applicant are not persuasive.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder Pal Mehra 6/12/05
Inder P Mehra
Examiner
Art Unit 2666

DANG TON
PRIMARY EXAMINER